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²
Sponges

1040.

593.

LIST
OF THE SPECIMENS OF
BRITISH SPONGES
IN
THE COLLECTION
OF THE
BRITISH MUSEUM.



LONDON:
PRINTED BY ORDER OF THE TRUSTEES
1848.

INTRODUCTION.

THE principal object of the present List has been to give a complete Catalogue of the British specimens of Sponges contained in the Collection of the British Museum, indicating at the same time the peculiarities of each as regards age, habitation, condition, and the source from whence it has been received.

With this view, the different individuals of each species contained in the Collection are indicated by the letters *a*, *b*, *c*, &c., following the name of the species and its synonyma, and followed by the *habitat*, state, and the source from whence the specimens were derived.

Those specimens which have been presented to the Museum have the name of the donor; and in general the collection from whence the specimen has been purchased or procured in exchange is also marked, as it often gives some authenticity to its history.

In the adoption of the generic and specific names it has been thought right to use, wherever it was possible, that which was first applied to the species. As far as regards the specific name, there is comparatively little difficulty in the application of this simple rule; but generic names have been used by different authors in senses so widely different, and the groups which they were meant to designate have been so variously extended and restricted, that it was no easy matter to determine, where several names have been used, which of them ought to be preferred. Great attention has been paid to consult the original authority, to know the type, and select the name which appeared to be the most ancient; and reference is made to the work in which, and the *date* when, each genus and its synonyma were respectively published.

Under each species there have been appended all the names under

which the animal or coral has been mentioned since the establishment of the Linnæan system of nomenclature, and reference is given to the work in which these were first used, and especially to the different works treating on British animals in which it is mentioned, and also a reference to the best figures. The chief part of these references have been extracted from the admirable and classical work on the Sponges by Dr. George Johnston, additional references having been made to older exotic works which have escaped his researches, or to others which have appeared since his publication.

The British Museum is fortunate in having received the chief portion of the specimens from the several authors who originally described the species, so that there can be no doubt of the specimens being the real representatives of the names they bear; for besides possessing some of the original specimens collected and described by Colonel George Montague and Dr. W. E. Leach, Dr. George Johnston of Berwick has most kindly presented to the Museum the whole of his Collection, which he used in the preparation of his classical work on this subject.

As the attention to the laws of priority, now so universally adhered to, has caused the alteration of a few of the names used in Dr. Johnston's work, a Concordance showing the changes has been added.

JOHN EDWARD GRAY.

June 12th, 1848.

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LIST OF BRITISH SPONGES.

CLASS. AMORPHOZOA.

Spongia, *Linn. S. N.* 1296.

Les Sponges, *Cuv. Tab. Elem.* 628, 1798; *Règ. Anim.* iii. 321, 1817.

Spongites, *Latreille, Fam. Nat.* 547.

Spongidizæ and Aleyonidezæ, *Gray, Brit. Plants*, 352, 354.

Spongiadæ, *Flem. B. A.* 518, 1828.

Spongiaires, *M. Edw. in Lam. Hist. Anim. s. Vert.* ed. 2. ii. 534.

Zoophyta porifera, *Grant, Crit. Comp. Anat.* 5; *Cyclop. Anat. and Phys.* p. 108; *Roget, Bridg. Treat.* p. 147.

Ceratophyta spongiosa, *Schweiger, Handb.* 421, 1820.

Amorphozoa, *Blainv. Man. Act.* 527; *Johnst. B. Sponges*, 78.

Spongia, *Lamour. Bull. Soc. Phil.* iii. 182, 1812.

Order I. SILICEA.

Fam. I. TETHYADÆ.

1. TETHYA.

Tethia or Tethya, *Lam. Anim. s. Vert.* ii. 384; *Gray, Br. Pl.* i. 361; *Flem. Brit. Anim.* 519; *Schw. Beobacht.* vii. and *Handb.* 422.

Tethea, *Johnston, Brit. Sp. and Coral.* pp. 81, 244.

Les Thétyes, *Cuv. Règ. Anim.* iii. 321.

Tethium, *Blainv. Man.* 544.

Alcionium β . *Cuv. Tab. Elem.* 682, 1798.

1. TETHYA Cranium.

Aleyonium Cranium, *Müll. Zool. Dan. Prod.* 255; *Zool. Dan.* tab. 85, not figured; *Turt. Gmel.* iv. 654; *Lamour. Cor. Flew.* 347, *Corall.* 248.

Tethya Cranium, *Lam. Anim. s. Vert.* ii. 386, and ii. 592, 2nd edit.; *Flem. Brit. Anim.* 519; *Blainv. Actinol.* 544; *Stark, Elem.* ii. 423; *Johnston, Brit. Sponges*, p. 83. t. 1. f. 1-8, and 244 (not *Risso, E. M.* v. 364).

Alcyonium globosum, Müll. *Zool. Dan.* tab. 157. figs. 1, 2.

Alcyonium Lyncurium, Esper, *Alcyon.* tab. 19. fig. 1; Jameson in *Wern. Mem.* i. 563.

Spongia pilosa, Montagu in *Wern. Mem.* ii. 119. pl. 13. figs. 1, 2.

Tethya pilosa, Gray, *Brit. Plants*, 362; Grant, *Edinb. N. Phil. Jour.* p. 196.

a. Slice of (*Tethya* Cranium), from Dr. Fleming. Presented by G. Johnston, M.D.

b, c. In spirits. Zetland. Presented by G. Johnston, M.D.

d. Spicula of *a*, in Canada balsam. Prepared by J. S. Bowerbank, Esq.

2. TETHYA aurantium.

Tetie sferica, Donati, *Nat. mar. dell' Adriat.* 64. tav. 9. figs. *a, b, c.*
Alcyonium aurantium, Pall. *Elench.* 357; Esper, *Alcyon.* tab. 19. fig. 4-8; copied from Donati.

Alcyonium Lyncurium, Gmelin. *Syst.* 1295; Turt. *Gmel.* iv. 653; Lamour. *Cor. Flex.* 343, *Corall.* 246; Bosc. *Vers.* iii. 159.

Tethya Lyncurium, Lam. *Anim. s. Vert.* ii. 386 (592, 2nd edit.); Risso, *L'Europ. Mérid.* v. 363; Blainv. *Actinol.* 544. pl. 91. fig. 3?; Delle Chiaje, *Anim. s. Vert. Nap.* iii. 116; Johnston, *Brit. Sp.* p. 85. Woodcut, N. 12. and p. 244.

Spongia verrucosa, Montagu in *Wern. Mem.* iii. 117. pl. 13. figs. 4, 5.

Tethya verrucosa, Gray, *Brit. Plants*, p. 362.

Tethya sphaerica, Fleming, *B. A.* 520; Bellamy, *South Devon*, 268.
a, b. Brit. Sponges, 87. fig. 12. Presented by G. Johnston, M.D.

c, d, e, f. In spirits. Cunnemara. Presented by G. Johnston, M.D.

g. Spicula of *a*, in Canada balsam. Prepared by J. S. Bowerbank, Esq.

h. In spirits. Torbay. Presented by Mrs. Griffith.

2. GEODIA.

Geodia, Lam. *Anim. s. Vert.* 2nd edit. ii. 593; ? Audouin et Milne Edwards, *Hist. Nat. du Litt. de la France*, i. p. 77; Blainv. *Man.* 534; Schweig. *Handb.* 422; Johnston, *Br. Spon.* pp. 195, 244.

Cydonium, Flem. *B. A.* 516; Blainv. *Dict. Sci. Nat.* lx. 489 (Sponge not animal).

Alcyonium, sp. Couch, *Corn. Fauna*, iii. 133.

1. GEODIA Cydonium.

Alcyonium Cydonium, Jameson in *Wern. Mem.* i. 563!; Stew. *Elem.* ii. 432; not Müll. *Zool. Dan.* t. 81.

Cydonium Mulleri, *Flem. Brit. Anim.* 516!; *Grant in Edinb. New Phil. Journ.* i. 195; *Johnston's Brit. Zooph.* 191; not *Blainv. Man.* 525.

Geodia Zetlandica, *Johnston, Brit. Sponges*, 195. t. 3. fig. 34.

Alcionio primo, *Donati, Stor. Nat.* t. 8. figs. *a, b, c, d?*

Aleyonium subviride, *Couch, Corn. Fauna*, iii. 133.

a. A slice of Cydonium Mulleri, figured *Brit. Sponges*, t. 3. figs. 3, 4. From Dr. Fleming. Presented by G. Johnston, M.D.

? *b.* ("G. Zetlandica"), Cornwall, W. C. Peach, Esq. Presented by G. Johnston, M.D.

c. Ireland. Presented by G. Johnston, M.D.

d. Spicula of *a*, in Canada balsam, prepared by J. S. Bowerbank, Esq.

3. PACHYMATISMA.

Pachymatisma, *Bowerbank, Trans. Microscop. Soc.* 1847; *Johnst. Brit. Sp.* 1842.

1. PACHYMATISMA Johnstonia.

Halichondria Johnstonia, *Bowerbank's MSS.*; *Johnst. Brit. Sponges*, 198. t. 5. fig. 3.

Pachymatisma Johnstonia, *Johnst. Brit. Sponges*, 244; *Bowerbank, Trans. Microscop. Soc.* i. t. .

a. Torquay, Devon, J. S. Bowerbank. Presented by G. Johnston, M.D.

b. In spirits, large size, Torquay. Presented by J. S. Bowerbank, Esq.

c. Spicula of *a*, in Canada balsam. Prepared by J. S. Bowerbank, Esq.

4. HALICHONDRIA.

Halichondria, *Flem. Brit. Anim.* 520, 1828; *Johnst. Br. Sp.* pp. 88, 244.

Halina, *Grant in Edinb. Encyclop.* xviii. 844.

Haliclona, *Grant, Outl. Comp. Anat.* 5.

Halispongia, *Blainv. Actinolog.* 532, 1834.

Tupha and Scypha, sp. *Gray*, 1821.

Manon, sp. *Schweig.* 1820.

Tragos, sp. *Schweig.* 1820.

Cliona, *Grant; Johnst. B. Zooph.* ed. 1.

Aleyonium, sp. *Esper; Lamk.* 1816 (not 1801).

Anthelia, sp. *Blainv. Dict. Sc. Nat.* lx.

Aleyonium β , *Cuv. Tab. Elem.* 682.

Chaonites, sp. *Mantell.*

a. TUPHA, sp. Gray.

1. HALICHONDRIA palmata.

Spongia palmata, *Sibb. Scot.* ii. lib. iv. 55; *Ellis and Soland. Zooph.* 189. pl. 58. fig. 6; *Turt. Gmel.* iv. 659; *Turt. Brit. Faun.* 209; *Jameson in Wern. Mem.* i. 562; *Montagu in ibid.* ii. 80; *Bosc. Vers.* iii. 172; *Stew. Elem.* ii. 434; *Lam. Anim. s. Vert.* ii. 379, and ii. 569, 2nd edit.; *Lamour. Cor. Flex.* 75, *Corall.* 181; *Parkins. Oryctology*, 46; *Stark, Elem.* ii. 424 (not *Templeton, Mag. N.H.*).

Tupha palmata, *Gray, Brit. Pl.* i. 355.

Halichondria palmata, *Flem. Brit. Anim.; Johnst. in Trans. Newc. Soc.* ii. 269; *Bellamy's South Devon*, 268; *Johnst. Brit. Spon.* p. 93. tab. 2, p. 148. figs. 15 and 24.

Halispongia palmata, *Blainv. Actinol.* 533. pl. 93. fig. 4.

Spongia bacillaris, *Linn. Syst.* 1299; *Müll. Zool. Dan. Prod.* 256; *Turt. Gmel.* iv. 659; *Lamour. Cor. Flex.* 83, *Corall.* 186; *Bosc. Vers.* iii. 171; *Parkins. Oryct.* 48.

Spongia oculata, *Esper, Spong.* tab. 1. figs. 1, 2.

Manon oculatum, *Schweig. Handb.* 422.

Mermaid's gloves, *Shetlanders.*

a. On coast of Berwick. Presented by G. Johnston, M.D.

b. Spicula of a, in Canada balsam. Prepared by J. S. Bow-
erbank, Esq.

2. HALICHONDRIA oculata.

Spongia ramosa, *Raii Hist.* i. 81, and *Synon.* 29. no. 1.

Spongia ramosa apicibus acutis furcis, *Petiv. Pterigraph. Amer.* tab. 19. fig. 3.

Branched English Sponge, *Ellis, Corall.* 80. no. 1. pl. 32. fig. f, F; *Phil. Trans. abridg.* xii. 261. pl. 7. B.

Spongia oculata, *Pall. Elench.* 390; *Linn. Syst.* 1298; *Ellis and Soland. Zooph.* 184; *Berk. Syn.* i. 213; *Turt. Gmel.* iv. 658; *Turt. Brit. Faun.* 208; *Stew. Elem.* ii. 434; *Montagu in Wern. Mem.* ii. 78. pl. 6. fig. 2; *Lam. Anim. s. Vert.* ii. 378, 2nd edit. ii. 569; *Bosc. Vers.* iii. 170; *Hogg's Stock.* 39; *Lamour. Cor. Flex.* 74, *Corall.* 121; *Parkins. Oryct.* 46.

Halichondria oculata, *Johnst. Brit. Sponges*, 94. t. 3, p. 245.

Tupha oculata, *Gray, Brit. Pl.* i. 354.

Sp. dichotoma, *Gmelin, Syst.* 1299; *Müll. Zool. Dan. Prod.* 256; *Ellis and Soland. Zooph.* 187; *Berk. Syn.* i. 213; *Turt. Gmel.* iv. 659; *Montagu in Wern. Mem.* ii. 82. pl. 6. fig. 1; *Lamour. Cor. Flex.* 67, *Corall.* 177; *Parkins. Oryct.* 45; *Lam. Anim. s. Vert.* ii. 375, 2nd edit. ii. 566; *Bosc. Vers.* iii. 171.

Spongia polychotoma, *Esper, Spong.* tab. 36.

Tupha dichotoma, *Gray, Brit. Pl.* i. 355.

Halichondria ramosa, *Flem. Brit. Anim.* 523; *Bellamy's South Devon*, 268.

Haliclona oculata, *Grant in Outl. Comp. Anat.* 5. fig. 2.

Halispongia ramosa, *Blainv. Actinolog.* 533.

L'H. paniforme, *Blainv. Atlas*, pl. 93. fig. 5.

a. Mouth of the Tay, "W. Jackson, jun." Presented by G. Johnston, M.D.

b. A fragment. Presented by G. Johnston, M.D.

c. Frith of Forth. Presented by G. Johnston, M.D.

d. On a crab, *Brit. Sp. t.* 3. Presented by G. Johnston, M.D.

e. Spicula of *a*, in Canada balsam. Prepared by J. S. Bowerbank, Esq.

3. *HALICHONDRIA cervicornis*.

Spongia ramosa, *Ger. Herb. em.* 1577, no. 9; *Merr. Pin.* 116.

Downy-branched English Sponge, *Ellis in Phil. Trans. abridg.* xii. 261. pl. 7. fig. C.

Spongia cervicornis, *Pall. Elench.* 388.

Halichondria cervicornis, *Johnst. Brit. Sponges*, 96. t. 4, 5. p. 245.

Sp. stuposa, *Ellis and Soland. Zooph.* 186; *Turt. Gmel.* iv. 659; *Turt. Brit. Faun.* 208; *Jameson in Wern. Mem.* i. 562; *Montagu in ibid.* ii. 79. pl. 3. figs. 1, 2, and pl. 4; *Stew. Elem.* ii. 434; *Bosc. Vers.* iii. 172; *Lamour. Cor. Flex.* 78, *Corall.* 183; *Parkins. Oryct.* 47; *Lam. Anim. s. Vert.* ii. 381, 2nd edit. ii. 572; *D. Chiaje, Anim. s. Vert. Nap.* iv. 150 (not *Esper*, t. 40).

Tupha stuposa, *Gray, Brit. Pl.* i. 354.

Spongia lanuginosa, *Esper, Spong. tab.* 24. figs. 1, 2; *Lam. Anim. s. Vert.* ii. 379, 2nd edit. ii. 570; *Lamour. Cor. Flex.* 75, *Corall.* 181; *Parkins. Oryct.* 46.

Spongia echidnæa, *Lamour. Cor. Flex.* 68, *Corall.* 177.

Var. β . *Johnst. Brit. Sp.* 96.

Spongia digitata, *Montagu in Wern. Mem.* ii. 84. pl. 7; *Flem. Brit. Anim.* 525 (not *Templeton, Mag. Nat. Hist.*).

Tupha digitata, *Gray, Brit. Pl.* i. 355.

Sp. fruticosa, *Esper, Spongia*, t. 10. figs. 1, 2?

a. Short, much-branched, "*S. stuposa* var. *damicornis*." Presented by G. Johnston, M.D.

b. Elongate, figured *Johnst. Brit. Sp.* t. 5. fig. 1. Presented by G. Johnston, M.D.

c. Elongate, figured *Johnst. Brit. Sp.* t. 5. fig. 2. Presented by G. Johnston, M.D.

d. Spicula of *b*, in Canada balsam. Prepared by J. S. Bowerbank, Esq.

4. HALICHONDRIA hispida.

Spongia hispida, Montagu in Wern. Mem. ii. 86. pl. 5. figs. 1, 2.

Tupha hispida, Gray, Br. Pl. i. 355.

Halichondria hispida, Flem. Br. Anim.; Johnst. Brit. Sp. pp. 98. and 245 (only known from Montagu's description).

a. "Cornish." Presented by G. Johnston, M.D.

b. Specimen of a, in Canada balsam. Prepared by J. S. Bowerbank, Esq.

5. HALICHONDRIA ? ramosa.

Spongia ramosa, Montagu in Wern. Mem. ii. 84. pl. 8; Flem. Brit. Anim. 526.

Tupha ramosa, Gray, Brit. Pl. i. 355.

Halichondria ? ramosa, Johnst. Brit. Spon. pp. 99, 245.

Inhab. coast of Devon, Montagu.

6. HALICHONDRIA tubulosa.

Spongia tubulosa, Montagu in Wern. Mem. ii. 91; Templeton in Mag. Nat. Hist. ix. 471 (not Solander and Ellis, t. 58. fig. 7).

Spongia semitubulosa ?, Lam. Anim. s. Vert. ii. 380, 2nd edit. ii. 570; Lamour. Cor. Flex. 76, Corall. 182; Parkins. Oryct. 46.

Scypha tubulosa, Gray, Brit. Pl. i. 357.

Halichondria Montaguui, Flem. Brit. Anim. 522; Johnst. Brit. Sp. p. 99. t. 6. fig. 1, p. 245.

a. Dublin Bay. Presented by G. Johnston, M.D.

b. Spicula of a, in Canada balsam. Prepared by J. S. Bowerbank, Esq.

7. HALICHONDRIA Columbæ.

Spongia Columbæ, Walker, Essays, 96.

Halichondria Columbæ, Flem. Brit. Anim. 521; Johnst. Brit. Spon. pp. 101 and 245.

Spongia cancellata, Sow. Brit. Misc. 131. pl. 60; Montagu in Wern. Mem. ii. 110; Turt. Brit. Faun. 208.

Scypha cancellata, Gray, Brit. Pl. i. 358.

Inhab. coast of Scotland, Walker; Brighton, Fellows.

8. HALICHONDRIA ? plumosa.

Spongia plumosa, Montagu in Wern. Mem. ii. 116; Flem. Br. Anim. 526; Gray, Br. Pl. i. 361.

Halichondria ? plumosa, Johnst. Br. Sp. pp. 103, 245.

Inhab. coast of Devon, Montagu.

9. HALICHONDRIA fruticosa.

Spongia fruticosa, *Montagu in Wern. Mem.* ii. 112. pl. 14. figs. 3, 4; *Gray, Brit. Pl.* i. 360; *Grant in Edin. New Phil. Journ.* ii. 139. pl. 2. fig. 10; the spiculum copied in *Blainv. Actinol.* pl. 94. fig. 10.

Halichondria fruticosa, *Flem. Brit. Anim.* 522; *Johnston, Br. Spon.* p. 104. t. 14. fig. 1, p. 245.

Spongia crispata, *Esper, Spong.* tab. 37. fig. 1-3?

Spongia licheniformis, *Lam. Anim. s. Vert.* ii. 354, 2nd edit. ii. 543?; *Lamour. Cor. Flex.* 22, *Corall.* 153?

a. "Cornwall, J. Couch, Esq." Presented by G. Johnston, M.D.

b. Washed. Presented by G. Johnston, M.D.

c.? Washed. Presented by G. Johnston, M.D.

d. Spicula of b, in Canada balsam. Prepared by J. S. Bowerbank, Esq.

b. TRAGOS, sp. *Schweig.*

10. HALICHONDRIA infundibuliformis.

Spongia infundibuliformis, *Petiv. Pterogr. Amer.* tab. 19. fig. 6?

Spongia infundibuliformis, *Linn. Syst.* 1296; *Müll. Zool. Dan. Prod.* 256. no. 3085; *Esper, Spong.* tab. 57. figs. 1, 2; *Jameson in Wern. Mem.* i. 562; *Turt. Gmel.* iv. 657; *Stew. Elem.* ii. 433; *Bosc. Vers.* iii. 168; *Montagu in Wern. Mem.* ii. 103; *Gray, Brit. Pl.* i. 359.

Spongia? crateriformis, *Pall. Elench.* 386.

Spongia calyciformis, *Lam. Anim. s. Vert.* ii. 365, 2nd edit. ii. 555.

Spongia Pocillum, *Lamour. Cor. Flex.* 45, *Corall.* 166 (not *Müll. et Fabric.*).

Halichondria infundibuliformis, *Flem. Brit. Anim.* 524; *Johnst. Brit. Spong.* p. 105. pl. 6. fig. 3, p. 246.

a. *Br. Sp.* t. 6. f. 3. Cumbra, Rev. D. Landsborough. Presented by G. Johnston, M.D.

b. Spicula of a, Canada balsam. Prepared by J. S. Bowerbank, Esq.

11. HALICHONDRIA ventilabrum.

Sea-fan Sponge, *Ellis in Phil. Trans. abridg.* xii. 261. p. 7. fig. H.

Spongia ventilabrum, *Linn. Syst.* 1296; *Müll. Zool. Dan. Prod.* 255; *Ellis and Soland. Zooph.* 188; *Turt. Gmel.* iv. 656; *Jameson in Wern. Mem.* i. 561; *Montagu in ibid.* ii. 105; *Stew. Elem.* ii. 433; *Bosc. Vers.* iii. 167; *Stark, Elem.* ii. 424; *Grant in Edin. New Phil. Journ.* i. 349, and ii. 122. pl. 2. fig. 5, copied in *Blainv. Atlas*, pl. 94. fig. 5.

Halichondria ventilabrum, *Johnst. B. Sponges*, 107. t. 7, p. 246.

Spongia ventilabriformis, *Gray, Brit. Pl.* i. 359.

Halichondria ventilabra, *Flem. Brit. Anim.* 523; *Thompson in Ann. Nat. Hist.* v. 254; *Bellamy's South Devon*, 268.

Halispongia ventilabra, *Blainv. Actin.* 533.

Spongia Zetlandica, *Jameson in Wern. Mem.* i. 561.

Spongia xerampelina, *Grant in Edin. Phil. Journ.* xiv. 116.

Ling Hoods, *Zetlanders*.

a. *Brit. Sp.* t. 7. Presented by G. Johnston, M.D.

b. Spicula of a, in Canada balsam. Prepared by J. S. Bowerbank, Esq.

Var. β . *Johnst. Brit. Sp.* 107.

Spongia Scypha, *Montagu in Wern. Mem.* ii. 107, pl. 15. fig. 1.

Sp. foliascens, *Gray, Brit. Pl.* i. 359.

c. HALICHONDRIA.

12. HALICHONDRIA simulans.

Halichondria simulans, *Johnston, Brit. Sp.* p. 109. t. 8, p. 206.

Var. a. Erect, irregularly branched (*Brit. Sp.* figs. 1, 2).

Var. β . Creeping, ramose or nodulous (fig. 3).

Halispongia reptans, *Scouler MS.*

Var. γ . Papillary (*Brit. Sp.* fig. 4).

Var. δ . Massive (*Brit. Sp.* fig. 5).

a. Branched. Dublin, Dr. Scouler. Presented by G. Johnston, M.D.

b. Branched, *Brit. Sp.* t. 8. f. 1. Dr. Scouler. Presented by G. Johnston, M.D.

c. Branched, *Brit. Sp.* t. 8. f. 2. Dr. Scouler. Presented by G. Johnston, M.D.

d. Branched. Dr. Scouler. Presented by G. Johnston, M.D.

e. Clavate, *Brit. Sp.* t. 8. f. 1. Dr. Scouler. Presented by G. Johnston, M.D.

f. Tuberoso, *Brit. Sp.* t. 8. f. 1. Dr. Scouler. Presented by G. Johnston, M.D.

g. Spicula of a, in Canada balsam. Prepared by J. S. Bowerbank, Esq.

13. HALICHONDRIA cinerea.

Spongia cinerea, *Grant in Edin. New Phil. Journ.* ii. 204. pl. 2. fig. 3 (the spiculum), copied in *Blainv. Actinol.* pl. 94. fig. 3.

Halichondria cinerea, *Flem. Brit. Anim.* 521; *Johnston, Br. Sp.* p. 111. t. 4. figs. 4, 5 (spicula, 246).

Spongia cærulea *Risso, L'Europ. Mérid.* v. 373?; *Delle Chiaje, Anim. s. Vert. Nap.* iii. 113. tav. 37. fig. 11?

Spongia pulverulenta, *Scouler MS.*

a. (Dublin Bay?) Presented by G. Johnston, M.D.

b.? On a rock, Scarborough, W. Bean. Presented by G. Johnston, M.D.

c. & e.? Presented by G. Johnston, M.D.

f. Spicula of a, in Canada balsam. Prepared by J. S. Bowerbank, Esq.

14. *HALICHONDRIA albescens*.

Halichondria albescens, *Johnst. Brit. Sponges*, 198. t. 20. f. 8, and p. 246.

Inhab. —?

15. *HALICHONDRIA panicea*.

Halichondria panicea, *Johnst. Brit. Sp.* 114. t. 10 & 11. fig. 5, p. 246; not *Fleming*.

Halichondria papillaris, *Flem. Brit. Anim.* 520; *Johnst. in Trans. Newc. Soc.* ii. 270. pl. 9. fig. 3.

Halispongia papillaris, *Blainv. Actinol.* 532.

Var. 1. *Johnst. Brit. Sp.* 114. t. 10. fig. 1.

Spongia tomentosa, *Gmelin, Syst.* 1299?; *Turt. Gmel.* iv. 659; *Turt. Brit. Faun.* 203; *Stew. Elem.* ii. 434; *Bosc. Vers.* iii. 171.

Alcyonium tomentosum, *Templeton in Mag. Nat. Hist.* ix. 470.
a. On *Fucus*, *Brit. Sp.* t. 10. f. 1. Ireland, W. Thompson.

Presented by G. Johnston, M.D.

Var. 2. *Johnst. Brit. Sp.* 114. t. 10. fig. 2.

Fucus marinus noster similis medullæ panis, *Raii Hist. Plant.* iii. 16.

Spongia informis durior, compressa, *Raii Syn.* i. 30. no. 7.

Alcyonium ramosum molle, medullæ panis intus simile, *Raii Syn.* 31. no. 1.

Sponge like crumb of bread, *Ellis, Corall.* 80. no. 2. pl. 16. fig. d. D; *Phil. Trans. abridg.* xii. 261. pl. 7. A.

Spongia panicea, *Pall. Elench.* 388; *Turt. Gmel.* iv. 660; *Lamour. Cor. Flex.* 29, *Corall.* 157; *Stew. Elem.* ii. 435; *Bosc. Vers.* iii. 173; not *Esper*, t. 18. f. 12.

Sp. urens, *Ellis and Soland. Zooph.* 187; *Hogg, Stock.* 38; *Templeton in lib. cit.* ix. 471.

Sp. tomentosa, *Montagu in Wern. Mem.* ii. 99; *Jameson in ibid.* i. 562; *Gray, Brit. Pl.* i. 361; *Grant in Edin. Phil. Journ.* xiv. 114.

Sp. urtica, *Risso, L'Europ. Mérid.* v. 370.

Alcyonium papillosum, var. 2, *Lamarck, Anim. s. Vert.* ii. 398, 2nd edit. ii. 604.

Alcyonium medullare, *Lam. Anim. s. Vert.* ii. 400, 2nd edit. ii. 606; *Templeton in Mag. Nat. Hist.* ix. 470; *Lamour. Cor. Flex.* 355, *Corall.* 251.

Alcyonium paniceum, *Lam. Anim. s. Vert.* ii. 400, 2nd edit. ii. 607.

Alcyonium tubulosum, *Esper, Alcyon.* 40. t. 11. figs. 1, 2 (on stalk of *Laminaria*).

b, c. Tubular, from stem of *Fucus*. Presented by G. Johnston, M.D.

d. Expanded, on *Fuci*. Presented by G. Johnston, M.D.

?e. & f. Presented by G. Johnston, M.D.

g. Spicula, in Canada balsam. Prepared by J. S. Bowerbank, Esq.

Var. 3. *Johnst. Brit. Sp.* 114. t. 10. figs. 3, 4. (Plate XI. fig. 5.) Cock's-comb Sponge, *Ellis in Phil. Trans. abridg.* xii. 261. pl. 7. fig. F.

Alcyonium manus diaboli, *Linn. Syst.* 1296; *Esper, Alcyon.* 66. t. 21. figs. 1, 2, and t. 22.

Spongia cristata, *Ellis and Soland. Zooph.* 186; *Turt. Gmel.* iv. 659; *Turt. Brit. Faun.* 208; *Bosc. Vers.* iii. 172; *Stew. Elem.* ii. 434; *Montagu in Wern. Mem.* ii. 103; *Lamour. Cor. Flex.* 28, *Corall.* 156; *Gray, Brit. Pl.* i. 359; *Templeton in lib.* ix. 471; *Risso, L'Europ. Mérid.* v. 370.

Sp. papillaris, *Montagu in Wern. Mem.* ii. 90; *Grant in Edin. New Phil. Journ.* i. 343, and ii. 138. pl. 2, 21, 25, 26; *Roget, Bridgew. Treat.* i. 149. fig. 53.

Seypha papillaris, *Gray, Brit. Pl.* i. 357.

Halina papillaris, *Grant in Cyclop. Anat. and Phys.* i. 108. fig. 29; and *Outl. Comp. Anat.* 311. fig. 108.

Spongia compacta, *Sowerby's Brit. Misc.* 85. pl. 42; *Turt. Br. Faun.* 208.

Var. 4. *Johnst. Brit. Sp.* 114. t. 11. fig. 5.

h, i, j. Presented by G. Johnston, M.D.

k. Dublin Bay. Presented by G. Johnston, M.D.

16. HALICHONDRIA aculeata.

Halichondria aculeata, *Bean MSS.*; *Johnst. Brit. Sp.* p. 131. pl. 13. figs. 1-3, p. 247.

Inhab. —?

d. ÆGAGROPILA.

17. HALICHONDRIA Fucorum.

Spongia Fucorum, *Esper, Spong.* tab. 49. figs. 1, 2.

Halichondria fucorum, *Johnst. Brit. Spon.* 112. t. 9-12. fig. 2, p. 246.

Spongia parasitica, *Montagu in Wern. Mem.* ii. 114; *Gray, Brit. Pl.* i. 360; *Grant in Edin. New Phil. Journ.* i. 348.

Halichondria parasitica, *Flem. Brit. Anim.* 521; *Thompson in Ann. Nat. Hist.* v. 254; *Bellamy's South Devon*, 268.

Halispongia parasitica, *Blainv. Actinol.* 532.

a. On *Sertularia*? "Ireland, W. Thompson, Esq." Presented by G. Johnston, M.D.

b, c. On *Floridea*. Ireland, W. Thompson, Esq. Presented by G. Johnston, M.D.

d. On *Fucus*, *Johnst. Br. Sp.* t. 9. Ireland, W. Thompson, Esq. Presented by G. Johnston, M.D.

- e. On *Sertularia falcata*. Liverpool, J. Rylands, Esq. Presented by G. Johnston, M.D.
- f. On *Conferva*. Craigorad, Ireland, W. Thompson, Esq. Presented by G. Johnston, M.D.
- g. Crustaceous var. Presented by G. Johnston, M.D.
- h. Spicula of *a*, in Canada balsam. Prepared by J. S. Bowerbank, Esq.

18. HALICHONDRIA incrustans.

- Alcyonium incrustans*, *Esper*, *Alcyon.* t. 15; *Lam. Anim. s. Vert.* ii. 397, 2nd edit. ii. 603; *Lamour. Cor. Flex.* 340, *Corall.* 244.
- Halichondria incrustans*, *Johnst. Brit. Spon.* p. 122. t. 12. fig. 3, and t. 13. fig. 5, p. 247.
- Spongia fava*, *Montagu in Wern. Mem.* ii. 115; *Gray, Brit. Pl.* i. 360.
- Spongia panicea*, *Grant in Edin. Phil. Journ.* xiii. 104, xiv. 118; and in *Edin. New Phil. Journ.* i. 347, ii. 128, 138. pl. 2. figs. 4, 24, 27-29, copied in *Blainv. Actinol.* pl. 94; not *Pallas*.
- Halichondria panicea*, *Flem. Brit. Anim.* 520; not *Johnst.*
- Halispongia panicea*, *Blainv. Actinol.* 532. not *robust.*
- b. Branched. Presented by G. Johnston, M.D.
 - c. "Spongia fava, *Mont.*" Presented by G. Johnston, M.D.
 - d. "Hal. panicea, *Flem.*" Presented by G. Johnston, M.D.
 - e. "Hal. panicea, *Flem.*" *Brit. Sp.* t. 12. f. 3. Presented by G. Johnston, M.D.
 - f, g, h. Mass with dry mucus. Presented by G. Johnston, M.D.
 - i. Mass, washed. Presented by G. Johnston, M.D.
 - j. Spicula of *a*, in Canada balsam. Prepared by J. S. Bowerbank, Esq.

19. HALICHONDRIA saburrata.

- Halichondria saburrata*, *Johnst. Br. Sp.* p. 121. t. 11. fig. 3, p. 197-247.
- a. *Br. Sp.* t. 11. f. 3. Presented by G. Johnston, M.D.
 - b. Presented by G. Johnston, M.D.
 - c. Spicula of *a*, in Canada balsam. Prepared by J. S. Bowerbank, Esq.

20. HALICHONDRIA ægagropila.

- Halispongia ægagropila*, *Scouler MSS.*
- Halichondria ægagropila*, *Johnst. Br. Sp.* p. 119. t. 11. f. 1, p. 248.
- a. With animal matter, *Br. Sp.* t. 11. f. 1. Dublin, Dr. Scouler. Presented by G. Johnston, M.D.
 - b, c. Washed. Ireland? Presented by G. Johnston, M.D.
 - d. Spicula of *a*, in Canada balsam. Prepared by J. S. Bowerbank, Esq.

21. *HALICHONDRIA seriata*.

Spongia seriata, *Grant in Edin. Phil. Journ.* xiv. 116.

Halichondria seriata, *Johnst. Br. Sp.* p. 125. t. 14. fig. 2, p. 197-248.

- a.* Tenby, J. S. Bowerbank. Presented by G. Johnston, M.D.
- b.* *Br. Sp.* t. 14. f. 2. Tenby, J. S. Bowerbank. Presented by G. Johnston, M.D.
- c.* Spicula of *a*, in Canada balsam. Prepared by J. S. Bowerbank, Esq.

22. *HALICHONDRIA sanguinea*.

Spongia sanguinea, *Grant in Edin. New Phil. Journ.* ii. 135, and 203. pl. 2. fig. 9.

Halichondria sanguinea, *Flem. Brit. Anim.* 521; *Johnst. Br. Sp.* 134. t. 14. fig. 3, p. 248.

Halispongia sanguinea, *Blainv. Actinol.* 532. pl. 94. fig. 9.

- a.* Dublin Bay, W. Thompson, Esq. Presented by G. Johnston, M.D.
- b.* Abnormal form. Presented by G. Johnston, M.D.
- c.* Berwick Bay. Presented by G. Johnston, M.D.
- d.* Dublin Bay. Presented by G. Johnston, M.D.
- e.* Spicula of *a*, in Canada balsam. Prepared by J. S. Bowerbank, Esq.

e. CLIONA.23. *HALICHONDRIA? celata*.

Halichondria? celata, *Johnst. Br. Sp.* p. 125. fig. 13, p. 197-248.

Var. 2. *Johnst. Brit. Sp.* 125.

Cliona celata, *Grant in Edin. New Phil. Journ.* i. 78, ii. 183. pl. 2. fig. 7 (the spiculum); *Flem. Brit. Anim.* 516; *Stark, Elem.* ii. 421; *Johnst. Brit. Zool.* 305. pl. 42. figs. 5, 6; *Du-jardin in Ann. des Sc. Nat. n. s. x.* 5.

La Clione cachée, *Blainv. Actinol.* 527. pl. 94. fig. 7. (The spiculum copied from Grant.)

- b, c, d.* Massive and rude. Cornwall, W. C. Peach, Esq. Presented by G. Johnston, M.D.
- a.* In holes in shells (*Cliona cinerea*). Scarborough, W. Bean, Esq. Presented by G. Johnston, M.D.
- e.* Mass in holes in stone. Devonshire. Presented by G. Johnston, M.D.
- f, g, h.* Mass in holes in stone. Presented by G. Johnston, M.D.
- i, j, k.* In holes in shells. Presented by G. Johnston, M.D.
- l.* Spicula of *a*, in Canada balsam. Prepared by J. S. Bowerbank, Esq.

24. *HALICHONDRIA hystrix*, *Johnst. MSS.*

- a.* Small round mass. Presented by G. Johnston, M.D.
b. Spicula of *a*, in Canada balsam. Prepared by J. S. Bowerbank, Esq.

f. *SUBERULA.*25. *HALICHONDRIA coalita.*

Spongia coalita, Müll. *Zool. Dan. Prod.* 256; *Zool. Dan.* iii. 71. t. 120; *Turt. Gmel.* iv. 662; *Montagu in Wern. Mem.* ii. 80; *Bosc. Vers.* iii. 177; *Lam. Anim. s. Vert.* ii. 382, 2nd edit. ii. 572; *Lamour. Cor. Flex.* 80, *Corall.* 184; *Parkins. Oryctol.* 47; *Grant in Edin. Phil. Journ.* xiv. 118, and in *Edin. New Phil. Journ.* ii. 123.

Tupha coalita, Gray, *Brit. Pl.* i. 355.

Halichondria coalita, *Flem. Brit. Anim.* 522; *Bellamy's South Devon*, 268; *Johnst. Br. Sp.* 135. t. 12. f. 1, p. 249.

Halispongia coalita, *Blainv. Actinol.* 532.

Spongia suberosa, *Esper, Spong.* t. 41.

a. *Br. Sp.* t. 12. f. 1. Frith of Forth? Presented by G. Johnston, M.D.

b. Spicula of *a*, in Canada balsam. Prepared by J. S. Bowerbank, Esq.

26. *HALICHONDRIA virgultosa.*

Spongia virgultosa, *Lam. Anim. s. Vert.* ii. 375, 2nd edit. ii. 565; *Lamour. Cor. Flex.* 66, *Corall.* 177; *Parkins. Oryctol.* 44.

Halichondria virgultosa, *Johnst. Brit. Sp.* 137. t. 15. figs. 1-3, pp. 197, 249.

a. *Brit. Sp.* t. 15. figs. 1 and 2. Scarborough, W. Bean, Esq. Presented by G. Johnston, M.D.

b. Spicula of *a*, in Canada balsam. Prepared by J. S. Bowerbank, Esq.

27. *HALICHONDRIA hirsuta.*

Halichondria hirsuta, *Flem. Brit. Anim.* 522; *Johnst. Brit. Sp.* p. 138. t. 16. fig. 1, p. 249.

Inhab. deep water, Zetland, *Fleming*; Ireland, *Thompson*.
Mus. W. Thompson.

28. *HALICHONDRIA domuncula.*

Spongia suberea, *Montagu in Wern. Mem.* ii. 100.

Halichondria suberea, *Johnst. Brit. Sp.* p. 139. t. 12. figs. 5, 6, p. 141. fig. 14, and pp. 197, 249.

Sp. suberosa, Gray, *Br. Pl.* 361.

Halichondria suberica, *Flem. Brit. Anim.* 522; *Coldstream in Edinb. New Phil. Journ.* ix. 235. pl. 2. figs. 3-5; *Thompson in Ann. Nat. Hist.* v. 254; *Bellamy's South Devon*, 268.

Halispongia suberica, *Blainv. Actinol.* 532.

Alcyonium domuncula, *Olivi, Adriad.* 241; *Lam. Hist.* ii. 4. ed. 2. ii. 600.

Anthelia domuncula, *Blainv. Dict. Sci. Nat.* lx. 487.

Spongia domuncula, *Lamour. Cor. Flex.* 28.

Alcyonium bulbosum, *Esper, Alcyon.* p. 41. t. 12. figs. 1-6.

Alcyonium tuberosum, *Esper, Alcyon.* t. 13. figs. 1-6.

Alcyonium compactum, *Lam. Anim. s. Vert.* ii. 400, 2nd edit. ii. 606; *Lamour. Cor. Flex.* 354, *Corall.* 251; *Parkins. Oryctol.* 59.

a. On a shell. Presented by G. Johnston, M.D.

b. On a shell. *Brit. Sp.* t. 12. fig. 6. Presented by G. Johnston, M.D.

c. On a shell. *Brit. Sp.* t. 12. fig. 5. Presented by G. Johnston, M.D.

d. Spicula of *a*, in Canada balsam. Prepared by J. S. Bowerbank, Esq.

e. In spirits. Aberystwyth. Presented by the Rev. J. Henslow.

Var. not on a shell.

Halichondria carnosus, *Johnst. Brit. Sp.* p. 146. t. 13. figs. 7, 8, p. 249.

H. suberea, var. *Bowerbank MSS.*

a, e. In spirits. Presented by G. Johnston, M.D.

f. Spicula of *e*, in Canada balsam. Prepared by J. S. Bowerbank, Esq.

29. HALICHONDRIA mammillaris.

Spongia mammillaris, *Müll. Zool. Dan.* iv. 44. tab. 158. figs. 3, 4; *Lamour. Cor. Flex.* 59, *Corall.* 173; *Thompson in Ann. Nat. Hist.* v. 254.

Halichondria mamillaris, *Johnston*, p. 142. t. 16. fig. 2, p. 249.

Spongia Penicillus, *Montagu in Wern. Mem.* ii. 93. pl. 13. fig. 7; *Flem. Brit. Anim.* 526; *Templeton in Mag. Nat. Hist.* ix. 471.

Spongia mamiferis, *Parkinson's Oryctology*, 43.

Spongia Imperati, *D. Chiaje, Anim. s. Vert. Nap.* iii. 114. tav. 37. figs. 18 and 23.

Tethya? penicilliformis, Gray, *Brit. Pl.* i. 362.

Inhab. —?

30. HALICHONDRIA Ficus.

Alcionio tuberoso in forma di fico, *Imperat. Ital.* 641. fig. inf.
Sponge called the Sea Fig, *Ellis and Soland. Zooph.* 206. pl. 59.
fig. 4.

Alcyonium Ficus, *Esper, Alcyon.* tab. 20. figs. 1-4; copied *Johnst. Brit. Sp.* t. 77. fig. 11; *Lamour. Cor. Flex.* 348; not *Pallas*.

Halichondria Ficus, *Johnst. Brit. Sp.* p. 144. t. 15. figs. 4 and 5, and p. 249.

Alcyonium ficiforme, *Lam. Anim. s. Vert.* ii. 394; edit. 2. ii. 599.
Spongia ficiformis, *Lamx. Cor. Flex.* 47; *Expos. Meth.* 29. t. 59.
f. 4.

Choanites Ficus, *Mantell, Geol. Sussex*, 179.

a. Scarborough, *Brit. Sp.* t. 15. fig. 4. W. Bean, Esq.
Presented by G. Johnston, M.D.

b. In primary state? Presented by G. Johnston, M.D.

c. Spicula in Canada balsam. Prepared by J. S. Bowerbank, Esq.

d, e. In spirits. "Mammaria," *Leach MSS.* Presented by J. Cranch, Esq.

31. HALICHONDRIA sevesa.

Halichondria sevesa, *Johnst. Brit. Sp.* p. 147. t. 16. figs. 3, 4,
pp. 198, 249.

36 *a.* *Brit. Sp.* t. 13. fig. 3. Isle of Man. E. Forbes, Esq.
Presented by G. Johnston, M.D.

b. Spicula of *a*, in Canada balsam. Prepared by J. S. Bowerbank, Esq.

32. HALICHONDRIA maculans.

Halichondria maculans, *Johnst. MSS.*

a. On a shell. Berwick Bay. Presented by G. Johnston, M.D.

b. Spicula of *a*, in Canada balsam. Prepared by J. S. Bowerbank, Esq.

Species requiring further examination.

33. HALICHONDRIA ? aurea.

Spongia aurea, *Montagu in Wern. Mem.* ii. 86; *Flem. Brit. Anim.* 526.

Tupha aurea, *Gray, Brit. Pl.* i. 356.

Halichondria ? aurea, *Johnst. Brit. Sp.* pp. 131, 248.

Inhab. — ?

34. HALICHONDRIA? Conus.

Spongia Conus, Montagu in Wern. Mem. ii. 85. pl. 10; *Flem. Brit. Anim.* 526.

Tupha conica, Gray, *Brit. Pl.* i. 356.

Halichondria? Conus, *Johnst. Brit. Sp.* pp. 132, 248.

Inhab. — ?

35. HALICHONDRIA? rigida.

Spongia rigida, Montagu in Wern. Mem. ii. 87. pl. 11. figs. 1, 2; *Flem. Brit. Anim.* 526.

Tupha rigida, Gray, *Br. Pl.* i. 356.

Halichondria? rigida, *Johnst. Brit. Sp.* pp. 132, 248.

Inhab. — ?

36. HALICHONDRIA? perlævis.

Spongia perlævis, Montagu in Wern. Mem. ii. 86; *Flem. Brit. Anim.* 526.

Tupha perlævis, Gray, *Brit. Pl.* i. 356.

Halichondria perlævis, *Johnst. Brit. Sp.* pp. 133, 248.

H. seriata var.?, *Johnst. loc. cit.* 248.

Inhab. — ?

5. BADIAGA.

Badiaga, Buxbaum, *Comm. Acad. Petrop.* ii. 1727, 343; *Spengler, Syst. Veg.* iv. 374, 1827.

Halichondria, sp. *Flem. B. A.* 524, 1828.

Spongilla, Lam. *Hist. Anim. s. Vert.* ii. 98, 1816, edit. 2, ii. 111; *Blainv. Man. Actinol.* 533–683; *Schweig. Handb.* 421; *Johnst. Brit. Sp.*; Gray, *Brit. Plants*, i. 353.

Spongia pars, Linn. *S. N.* 1299.

Cristatella, Lamk. *Syn.* 385, 1801 (Sponge not animal), not 1816; *Lamx. Bull. Soc. Phil.* ii. 182, 1812; not *Cuv. Tabl. Elem.* 1798.

Tupha, Oken, *Lehrb.* 1815; *Schweig. Handb.* 421; not Gray, 1820.

Ephydatia, Lamour. *Cor. Flex.* 2, 1816.

1. BADIAGA fluviatilis.

Spongia fluviatilis, Pall. *Elench.* 384; Linn. *Syst.* 1299; Berk. *Syn.* i. 213; Turt. *Gmel.* iv. 662; *Blumenb. Man.* 272; *Bosc. Vers.* iii. 178.

Badiaga fluviatilis, Spreng. *Syst. Veg.* iv. 374.

Ephydatia fluviatilis, Lamour. *Cor. Flex.* 6, *Corall.* 148.

Halichondria fluviatilis, *Flem. Brit. Anim.* 524.

Spongilla fluviatilis, *Johnst. Brit. Sp.* 159. t. 17, 18, p. 250.

Les Éponges d'eau douce, Gervais in *Ann. des Sc. Nat. n. s.* iv. 254.

- Spongilla ou Éponge d'eau douce, *Dujardin in Ann. des Sc. Nat. n. s. x. 4. pl. 1. figs. 1-4.*
- Cristatella, ou Éponges fluviatiles, *Lamx. Bull. Soc. Phil. iii. 182.*
- Var. *a.* *Sponge crustaceous, massive and slightly lobed, or throwing up short branches. Johnst. Brit. Sp. t. 17.*
- Spongia fluviatilis anfractuosa, perfragilis, ramosissima nostras, *Plunk. Phytog. tab. 112. fig. 3.*
- Spongia fluviatilis ramosa fragilis, *Raii Hist. Pl. iii. 16; Syn. i. 30. no. 6.*
- Fungus vel potius Spongia viridis, doliolis adnascenti similis, *Raii Syn. i. 57. no. 11.*
- Spongia lacustris, *Linn. Flor. Suec. 439. no. 1190; Fl. Lapp. 389; Syst. Nat. 1299; Esper, Spong. tab. 23 A. figs. 1-11; Berk. Syn. i. 213; Turt. Gmel. iv. 662; Turt. Brit. Faun. 209; Stew. Elem. ii. 435; Bosc. Vers, iii. 178; Link in Ann. des Sc. Nat. n. s. Bot. ii. 328.*
- Badiaga major, *Buxbaum, l. c. 343.*
- Spongia friabilis, *Esper, Spong. tab. 62. figs. 1-4; Turt. Gmel. iv. 662; Bosc. Vers, iii. 178.*
- Ephydatia lacustris, *Lamour. Cor. Flex. 7, Corall. 149.*
- Ephydatia friabilis, *Lamour. Cor. Flex. 6, Corall. 148.*
- Spongilla friabilis, *Lam. Anim. s. Vert. ii. 100, 2nd edit. ii. 114; Risso, L'Europ. Mérid. v. 367; Grant in Edinb. Phil. Journ. ii. 138. pl. 2. fig. 1 (the spiculum), copied in Blainv. Atlas, pl. 94. fig. 1; Blainv. Man. 534; Schweig. Handb. 421; Templeton in Mag. Nat. Hist. ix. 470; Stark, Elem. ii. 442.*
- Spongilla pulvinata, *Lam. Anim. s. Vert. ii. 99, 2nd edit. ii. 113; Gray, Brit. Pl. i. 353.*
- Spongilla fluviatilis, *Blainv. Actinol. 534. pl. 92. fig. 6; Hogg's Stockton, 39; Hogg in Ann. Nat. Hist. i. 478, ii. 370, iii. 58 and 459, vi. 315; Hogg in Trans. Linn. Soc. xviii. 363, and in Charlesworth's Mag. Nat. Hist. iv. 259; Johnst. Brit. Sp. p. 159. pl. 17 & 18.*
- Spongilla lacustris, *Blainv. Actinol. 534.*
- Var. *β.* *Erect and branched, plant-like. Johnst. Brit. Sp. t. 18.*
- Spongia ramosa fluviatilis Newtoni, *Raii Hist. Pl. i. 81; Syn. i. 30. no. 5.*
- Badiaga cinerea, *Buxbaum, l. c. ii. 343.*
- Spongia fluviatilis?, *Linn. Fl. Suec. 440. no. 1191.*
- Spongia lacustris, *Esper, Spong. tab. 23. figs. 1, 2.*
- Spongia canalium, *Turt. Gmel. iv. 662; Bosc. Vers, iii. 179.*
- Ephydatia canalium, *Lamour. Cor. Flex. 6, Corall. 148; Fleming in Edinb. Phil. Journ. ii. 88; Flem. Phil. Zool. ii. 614. pl. 5. fig. 4.*
- Spongilla ramosa, *Lam. Anim. s. Vert. ii. 100, 2nd edit. ii. 114; Gray, Brit. Pl. i. 353; Dutrochet in "Ann. des Sc. Nat. 1828, p. 205," Bull. des Sc. Nat. xvii. 156; Stark, Elem. ii. 442.*

Badiaga minor, *Buxbaum, Comm. Petrop.* ii. 1727, 343; *Cent.* v. 12. t. 23. fig. 2.

Spongilla canalium, *Blainv. Actinol.* 534.

Spongilla lacustris, *Schweig. Handb.* 421.

Spongilla pulvinata, *Templeton in Mag. Nat. Hist.* ix. 470.

a. Northumberland. Presented by G. Johnston, M.D.

b.? Presented by G. Johnston, M.D.

c. Erect, branched. Goole, W. Bean, Esq. Presented by G. Johnston, M.D.

d, e. Massive. Presented by G. Johnston, M.D.

f. Spicula of *a*, in Canada balsam. Prepared by J. S. Bow-
erbank, Esq.

g. In spirits. Presented by J. E. Gray, Esq.

2. BADIAGA lacustris.

Spongilla lacustris, *Johnst. Brit. Sp.* pp. 162, 250.

Spongia lacustris, "*Don's Animals of Forfarshire*, 36."

Halichondria lacustris, *Flem. Brit. Anim.* 524.

6. SPONGIA.

Spongia pars, *Linn.*

Achilleum, *Schweig. Beobacht.* vii., *Handb.* 421; not *Oken*.

Spongia, *Lamk. Syst.* 1891; *Lamour. Bull. Soc. Phil.* 1812;
Flem. Brit. Anim. 524, 1828; *Blainv. Man.* 529; *Johnst. Brit.*
Sp. pp. 164, 250.

1. SPONGIA pulchella.

Spongia pulchella, *Sowerby, Brit. Misc.* 87. pl. 43; *Jameson in Wern. Mem.* i. 562; *Turt. Brit. Faun.* 208; *Montagu in Wern. Mem.* ii. 109; *Gray, Brit. Plants*, i. 359; *Flem. Brit. Anim.* 524; *Templeton in Mag. Nat. Hist.* ix. 471; *Bellamy's S. Devon*, 268; *Johnst. Brit. Sp.* p. 167. t. 19. figs. 1, 2 (p. 171. fig. 16?), p. 250.

a. Washed. Presented by G. Johnston, M.D.

b. Washed. *Brit. Sp.* t. 29. fig. 2. Berwick Bay? Presented by G. Johnston, M.D.

2. SPONGIA limbata.

Spongia limbata, *Montagu in Wern. Mem.* ii. 111. pl. 15. figs. 2, 3;
Gray, Brit. Pl. i. 360; *Flem. Brit. Anim.* 526; *Johnst. Brit.*
Sp. 168. t. 19. figs. 3, 4, 5, p. 250.

Spongia lobata, *Montagu in Wern. Mem.* ii. 85. pl. 9. fig. 1;
Flem. Brit. Anim. 526.

Tupha lobata, *Gray, Brit. Pl.* i. 356.

a. Var. Berwick Bay. Presented by G. Johnston, M.D.

- b.* Small mass, washed. Devonshire. Presented by G. Johnston, M.D.
c, d & e. Mass, washed. Presented by G. Johnston, M.D.
f. Rounded mass with dry mucus. Presented by G. Johnston, M.D.

3. SPONGIA? lævigata.

Spongia lævigata, *Montagu in Wern. Mem.* ii. 95. pl. 16. fig. 4;
Flem. Brit. Anim. 526; *Johnst. Brit. Sp.* pp. 170, 250.
Scypha lævigata, *Gray, Brit. Pl.* i. 358.
 Inhab. —?

Dubia?

? *Spongia prolifera*, *Grant, Edinb. Phil. Journ.* xiv. 116 (not *Scot-lander and Ellis*); not described.
 Inhab. —?

7. DYSIDEA.

Duseideia, *Johnston*, 1842, p. 185.
Dysidea, *Johnston*, 1842, p. 251.

1. DYSIDEA fragilis.

Spongia fragilis, *Montagu in Wern. Mem.* ii. 114. pl. 16. figs. 1, 2;
Gray, Brit. Pl. i. 360; *Flem. Brit. Anim.* 526; *Templeton in Mag. Nat. Hist.* ix. 471.

Duseideia fragilis, *Johnst. Brit. Sp.* p. 187. t. 13. fig. 6, and t. 14. fig. 4.

Dysidea fragilis, *Johnst. Brit. Sp.* 251.

Halichondria areolata, *Johnst. Brit. Sp.* 121. t. 13. fig. 4, pp. 197 and 247.

a, b, c, d. Washed. Presented by G. Johnston, M.D.

e, f, g, h, i, with the mucus preserved to dry. Presented by G. Johnston, M.D.

j, with mucus in spirits. Presented by G. Johnston, M.D.

k. "Halichondria areolata."

l. Spicula of *a*, in Canada balsam. Prepared by J. S. Bowerbank, Esq.

a. "Hal. areolata." Portaferry, Strangford Lough, W. Thompson, Esq. Presented by G. Johnston, M.D.

2. DYSIDEA? papillosa.

Spongia suberea, *Johnst. in Mag. Nat. Hist.* vii. 491. fig. 60.

Duseideia papillosa, *Johnst. Brit. Sp.* t. 16. figs. 6, 7, pp. 190, 191. fig. 18.

Dysidea? papillosa, *Johnst. Brit. Sp.* 251.

a. On fragment of a shell. Scarborough. Presented by G. Johnston, M.D.

b. Spicula of *a*, in Canada balsam. Prepared by J. S. Bowerbank, Esq.

8. HALISARCA.

Halisarca, *Dujard.* 184?; *Johnst. Brit. Sp.* 1847.

1. HALISARCA Dujardinii.

Halisarca, *Dujardin in Ann. des Sc. Nat. n. s. x.* 7. pl. 1. fig. 5.

Hal. Dujardinii, *Johnst. Brit. Sp.* p. 192. t. 16. fig. 8, p. 61. fig. 9, p. 251.

Inhab. —.

Order II. CALCAREA.

Fam. 2. GRANTIADÆ.

9. GRANTIA.

Grantia, *Flem. Brit. An.* 524, 1828; *Johnst. Brit. Sp.* pp. 172, 251.

Leucalia, *Grant in Edinb. Encyclop.* xviii. 844.

Leuconia, *Grant, Outl. Comp. Anat.* 7.

Calcispongia, *Blainv. Dict. Sc. Nat.* lx. 1830; *Man.* 530.

Spongia pars, *Linn., Lam., Lamour.*

Scypha pars, *Gray, Brit. Pl.* i. 357.

Scyphia pars, *Schweig. Handb.* 422, 1820.

1. GRANTIA compressa.

Spongia compressa, *Fabric. Faun. Grænl.* 448; *Turt. Gmel.* iv.

661; *Bosc. Vers.* iii. 176; *Jameson in Wern. Mem.* i. 562;

Lamour. Cor. Flex. 48, *Corall.* 168; *Grant in Edinb. New*

Phil. Journ. i. 166, and ii. 122, 127. pl. 2. figs. 11, 12, 13 and

23; copied in *Blainv. Atlas*, pl. 94; not *Esper*.

Spongia foliacea, *Montagu in Wern. Mem.* ii. 92. pl. 12; *Templeton in Mag. Nat. Hist.* ix. 471; not *Esper*.

Scypha foliacea, *Gray, Brit. Pl.* i. 358.

Grantia compressa, *Flem. Br. Anim.* 524; *Johnst. in Trans. Newc.*

Soc. ii. 270; *Brit. Sp.* 174. t. 20. fig. 1, p. 251; *Bellamy's*

South Devon, 268; *Hassall in Ann. Nat. Hist.* vi. 174.

Leuconia compressa, *Grant's Outl. Comp. Anat.* p. 7. fig. 3.

Calcispongia compressa, *Blainv. Actinol.* 531.

Spongia urceolus, *Müller, Zool. Dan.* iv. 42. t. 157. fig. 3, ? var.

a-e. Brit. Sp. t. 20. fig. 1. Berwick Bay. Presented by G. Johnston, M.D.

f. In spirits. Presented by G. Johnston, M.D.

g. Spicula of a, in Canada balsam. Prepared by J. S. Bowerbank, Esq.

2. GRANTIA lacunosa.

Grantia lacunosa, Bean MSS.; Johnst. Brit. Sp. p. 176. t. 20. figs. 2, 3, p. 251.

a. Brit. Sp. t. 20. figs. 2, 3. Scarborough, W. Bean, Esq. Presented by G. Johnston, M.D.

b. Spicula of a, in Canada balsam. Prepared by J. S. Bowerbank, Esq.

3. GRANTIA ciliata.

Spongia ciliata, Fabric. Faun. Grænl. 448; Turt. Gmel. iv. 657; Bosc. Vers, iii. 169; Lamour. Cor. Flex. 55, Corall. 151.

Spongia coronata, Ellis and Soland. Zooph. 190. pl. 58. figs. 8, 9, copied in Esper, Spong. tab. 61. figs. 5, 6; Turt. Gmel. iv. 657; Turt. Brit. Faun. 208; Stew. Elem. ii. 433; Bosc. Vers, iii. 169; Montagu in Wern. Mem. ii. 88; Lamour. Cor. Flex. 54, Corall. 171; Lam. Anim. s. Vert. ii. 370, 2nd edit. ii. 560; Schweig. Beobacht. 80. tab. 5. fig. 47, opt. !; Grant in Edin. New Phil. Journ. i. 170, ii. 122. pl. 2. figs. 17, 18; copied in Blainv. Atlas, pl. 94. figs. 17, 18.

Spongia panicea, Esper, Spong. tab. 18. figs. 1, 2.

Scypha coronata, Gray, Brit. Pl. i. 357.

Grantia coronata, Hassall in Ann. and Mag. Nat. Hist. vi. 174.

Grantia ciliata, Flem. Brit. Anim. 325; Johnst. in Trans. Newc. Soc. ii. 271; Bellamy's South Devon, 269; Thompson in Ann. Nat. Hist. v. 254; Johnst. p. 176. t. 20. f. 4, 5, t. 21. f. 6, 7, and p. 1. f. 1, p. 252.

Calcispongia ciliata, Blainv. Actinol. 531.

Spongia fistulosa, Chiaje, Anim. Nap. iii. 113. t. 37. f. 14, 15.

a, b, c. On Conferva. Ireland, W. Thompson, Esq. Presented by G. Johnston, M.D.

d. With G. compressa. Presented by G. Johnston, M.D.

e, f, g. On Fucus. R. Orwell, Essex. Presented by W. B. Clarke, M.D.

h, i, k. In spirits. Presented by G. Johnston, M.D.

l. In spirits. Presented by G. Johnston, M.D.

m. Spicula of a, in Canada balsam. Prepared by J. S. Bowerbank, Esq.

4. *GRANTIA pulverulenta*.

Spongia ananas var., *Montagu in Wern. Mem.* ii. 97. pl. 16. fig. 3.

Sp. *pulverulenta*, *Grant in Edin. New Phil. Journ.* i. 170.

Scypha ovata, *Gray, Brit. Pl.* i. 358.

Grantia pulverulenta, *Flem. Brit. Anim.* 525; *Bellamy's South Devon*, 269; *Johnst. Brit. Sp.* 180, 252.

Spongia inflata, *Della Chiaje, Anim. s. Vert. Nap.* iii. p. 114. tav. 37. figs. 16, 17.

Var. ? *Spongia ananas*, *Mont. Wern. Trans.* ii. 96. t. 16. figs. 1, 2; *Johnst. Brit. Sp.* 181.

Grantia ananas, *Fleming, B. A.* 525.

Inhab. — ?

5. *GRANTIA fistulosa*.

Grantia fistulosa, *Johnst. Brit. Sp.* p. 181. t. 20. fig. 7, p. 252.

a. Portaferry, Ireland, W. Thompson. Presented by G. Johnston, M.D.

b. Spicula of a, in Canada balsam. Prepared by J. S. Bowerbank, Esq.

6. *GRANTIA botryoides*.

Spongia botryoides, *Ellis and Soland. Zooph.* 190. pl. 58. figs. 1–4; copied in *Esper, Spong.* tab. 61. figs. 1–4; *Turt. Gmel.* iv. 660; *Turt. Brit. Faun.* 209; *Stew. Elem.* ii. 434; *Bosc. Vers.* iii. 173; *Montagu in Wern. Mem.* ii. 89; *Lamour. Cor. Flex.* 81, *Corall.* 184; *Lam. Anim. s. Vert.* ii. 382, 2nd edit. ii. 573; *Templeton in Mag. Nat. Hist.* ix. 471.

Sp. *complicata*, *Montagu in Wern. Mem.* ii. 97. pl. 9. figs. 2, 3; *Gray, Brit. Pl.* i. 358; *Grant in Edin. New Phil. Journ.* i. 169.

Spongia confervicola, *Templeton in Mag. Nat. Hist.* ix. 470. f. 67.

Scypha botryoides, *Gray, Brit. Pl.* i. 357.

Grantia botryoides, *Flem. Brit. Anim.* 525; *Johnst. in Trans. Newc. Soc.* ii. 270; *Bellamy's South Devon*, 268; *Johnst. Brit. Sp.* p. 179. t. 21. figs. 1–5, p. 252.

Calcispongia botryoides, *Blainv. Actinol.* 531.

a & g. *Br. Sp. t.* Bangor, W. Thompson, Esq. Presented by G. Johnston, M.D.

b. On slate, *Br. Sp. t.* 21. f. 3. Holy Island. Presented by G. Johnston, M.D.

c, d. On slate. Holy Island. Presented by G. Johnston, M.D.

e, f. On *Fucus*. Berwick Bay. Presented by G. Johnston, M.D.

g. Spicula of a, in Canada balsam. Prepared by J. S. Bowerbank, Esq.

7. *GRANTIA nivea*.

Spongia nivea, *Grant in Edin. Phil. Journ.* xiv. 339; and in *Edin. New Phil. Journ.* i. 168, and ii. 139. pl. 1. figs. 14–16; copied in *Blainv. Actinol.* pl. 94.

Grantia nivea, *Flem. Brit. Anim.* 525; *Johnst. Brit. Sp.* p. 182. pl. 21. fig. 8, p. 252.

Calcispongia nivea, *Blainv. Actinol.* 531.

a & *b*. Presented by G. Johnston, M.D.

c. Var. *cristata*, *Br. Sp.* t. 20. f. 6. Mr. M'Calla. Presented by G. Johnston, M.D.

d. Spicula of *a*, in Canada balsam. Prepared by J. S. Bowerbank, Esq.

8. *GRANTIA coriacea*.

Spongia coriacea, *Montagu in Wern. Mem.* ii. 116; *Gray, Brit. Pl.* i. 361; *Flem. Brit. Anim.* 526.

Grantia multicavata, *Bean MSS.*

Grantia coriacea, *Johnst. Brit. Sp.* p. 183. t. 21. fig. 9, p. 252.

a, *b*. *Br. Sp.* t. 21. f. 9. Berwick Bay. Presented by G. Johnston, M.D.

c. In spirits. Presented by G. Johnston, M.D.

d. Spicula of *a*, in Canada balsam. Prepared by J. S. Bowerbank, Esq.

APPENDIX.

Foreign Specimens accidentally introduced into the Fauna.

Spongia prolifera, *Solander and Ellis*, t. ; *Templeton, Mag. Nat. Hist.* ix. 472; *Johnst. Br. Sp.* 170.

Inhab. Belfast, from a ship.

I N D E X.

ACHILLEUM, 18	Anthelia, 3	bulbosum, Aley., 14
aculeata, Hal., 10	areolata, Hal., 19	cærulea, Sp., 8
ægagropila, Hal., 11, 12	aurantium, Aley., 2	Calcispongia, 20
albescens, Hal., 9	aurea, Sp., 15	calyciformis, Sp., 7
Alcyonium, 1, 2	bacillaris, Sp., 4	canalium, Sp., 17
Amorphozoa, 1	Badiaga, 16	cancellata, Sp., 6
ananas, Sp., 21, 22	botryoides, Sp., 22	carnosa, Hal., 14

- celata, Clion., 12
 cervicornis, Sp., 5
 Chaonites, 3, 15
 ciliata, Sp., 21
 cinerea, Sp., 8, 17
 Cliona, 3, 12
 coalita, Sp., 13
 columbæ, Sp., 6
 compacta, Sp., 10
 compactum, Alc., 14
 complicata, Sp., 22
 compressa, Sp., 20
 confervicola, Sp., 22
 conica, Sp., 16
 Conus, Sp., 16
 coriacea, Sp., 23
 coronata, Sp., 21
 Cranium, Alcy., 1
 crateriformis, Sp., 7
 crispata, Sp., 7
 cristata, Sp., 10
 Cristatella, 16
 Cydonium, 2; Alc., 2
 dichotoma, Sp., 4
 digitata, Sp., 5
 domuncula, Alcy., 14
 Dujardinii, Hal., 20
 Duseideia, 19
 Dysidea, 19
 echidnæa, Sp., 5
 Ephydatia, 16
 fava, Sp., 11
 ficiforme, Alcy., 15
 Ficus, Alcy., 15
 fistulosa, Sp., 21, 22;
 Gran., 22
 fluviatilis, Sp., 16
 foliacea, Sp., 20
 foliascens, Sp., 8
 fragilis, Sp., 19; Dus., 19
 friabilis, Sp., 17
 fruticosa, Sp., 5, 7
 Fucorum, Sp., 10
 Geodia, 2
 globosum, Alcy., 1
 Grantia, 20
 Grantiadæ, 20
 Haliclona, 3
 Halina, 3
 Halisarca, 20
 Halispongia, 3
 hirsuta, Hal., 13
 hispida, Sp., 6
 Hystrich, Hal., 13
 Imperati, Sp., 14
 incrustans, Alcy., 11
 inflata, Sp., 22
 informis, Sp., 9
 infundibuliformis, Sp.,
 7
 Johnstonia, Pach., 3
 lacunosa, Gran., 21
 lacustris, Sp., 17, 18
 lævigata, Sp., 19
 lanuginosa, Sp., 5
 Leucalia, 20
 Leuconia, 20
 licheniformis, Sp., 7
 limbata, Sp., 18
 lobata, Sp., 18
 Lynceurium, Alcy., 2
 maculans, Hal., 15
 mamillaris, Sp., 14
 Mammaria, 15
 mammiferis, Sp., 14
 major, Bad., 17
 Manon, 3
 manus diaboli, Alc., 10
 medullare, Alcy., 9
 minor, Bad., 17
 Montaguui, Hal., 6
 Mulleri, Cyd., 3
 multicavata, Gran., 23
 nivea, Sp., 23
 oculata, Sp., 45
 oculatum, Manon, 4
 Pachymatisma, 3
 palmata, Sp., 3, 4
 panicea, Sp., 9, 11, 21
 paniceum, Alcy., 10
 papillaris, Sp., 9, 10
 papillosa, Dus., 19
 papillosum, Alcy., 9
 parasitica, Sp., 11
 penicilliformis, Teth.,
 15
 Penicillus, Sp., 14
 perlævis, Sp., 16
 pilosa, Sp., 2
 plumosa, Sp., 6
 Pocillum, Sp., 7
 polychotoma, Sp., 4
 prolifera, Sp., 19, 23
 pulchella, Sp., 18
 pulverulenta, Sp., 9, 22
 pulvinata, Sp., 17
 ramosa, Sp., 4, 5, 6, 17
 ramosum, Alcy., 9
 rigida, Sp., 16
 saburata, Hal., 11
 sanguinea, Sp., 12
 Scypha, 3, 20; Sp., 8
 semitubulosa, Sp., 6
 seriata, Sp., 12
 sevesa, Hal., 15
 simulans, Hal., 8
 sphærica, Teth., 2
 Spongia, 1-23
 Spongiaires, 1
 Spongites, 1
 suberea, Sp., 14, 19
 suberica, Hal., 14
 suberosa, Sp., 13, 14
 subviride, Alcy., 3
 Tethea, 1
 Tethium, 1
 Tethya, 2
 tomentosa, Sp., 10
 tomentosum, Alcy., 14
 Tragos, 3
 tuberosum, Alcy., 14
 tubulosa, Sp., 6
 tubulosum, Alcy., 10
 urceolus, Sp., 20
 urens, Sp., 9
 urtica, Sp., 9
 ventilabrum, Sp., 7
 verrucosa, Sp., 2
 virgultosa, Sp., 13
 xerampelina, Sp., 8
 Zetlandica, Sp., 8;
 Geod., 3.

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